

1/29

FIG. 1 PRIOR ART

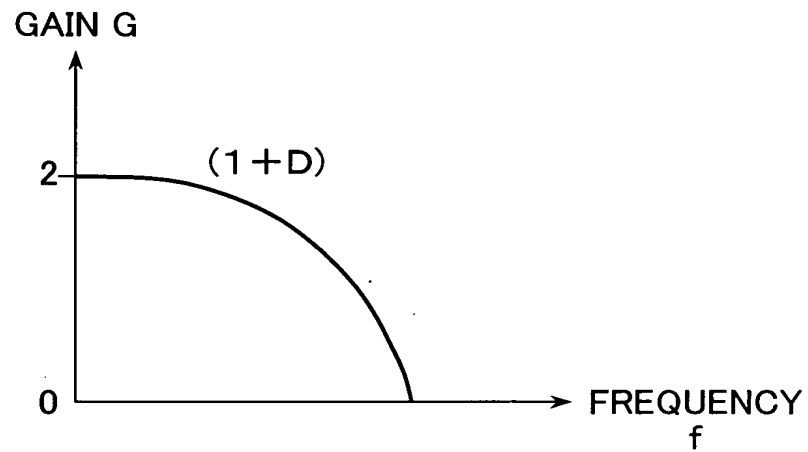
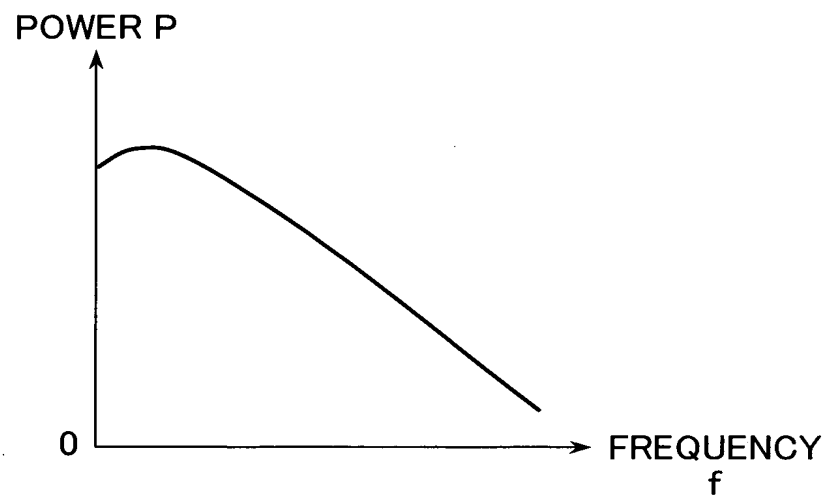


FIG. 2 PRIOR ART



2/29

FIG. 3 PRIOR ART

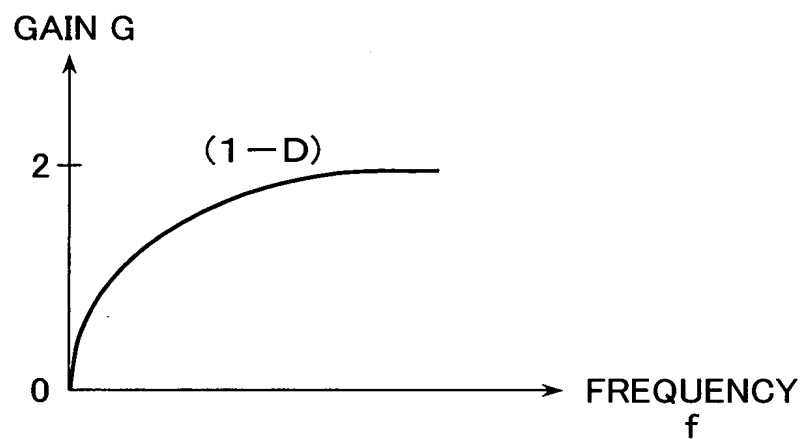
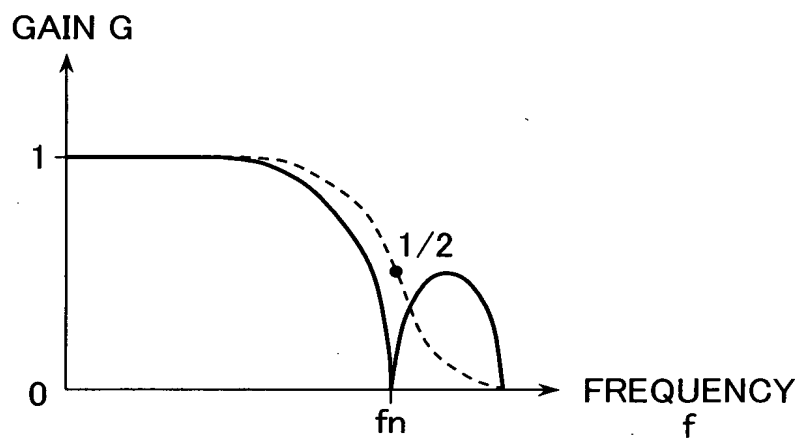


FIG. 4 PRIOR ART



3/29

FIG. 5

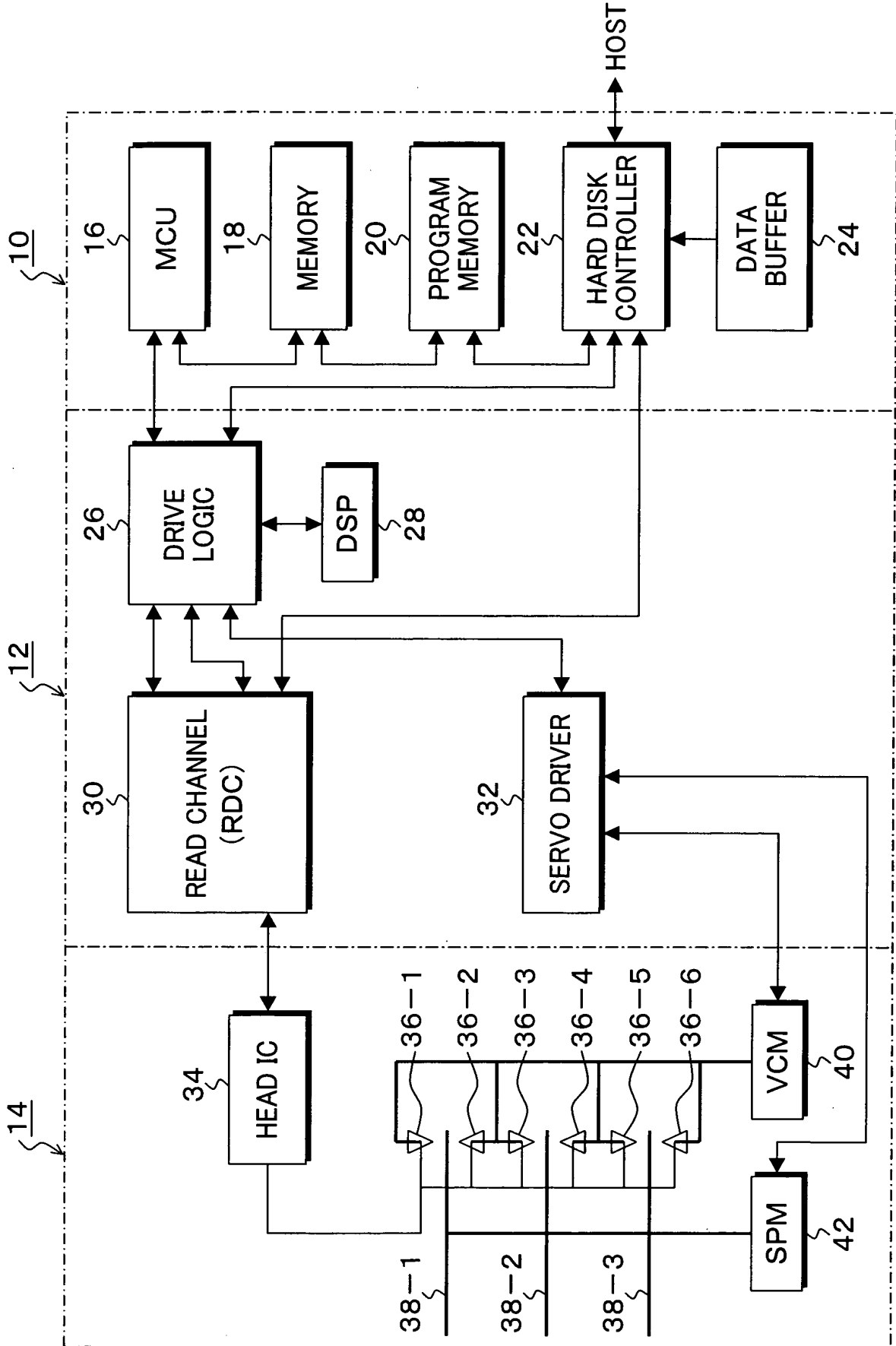
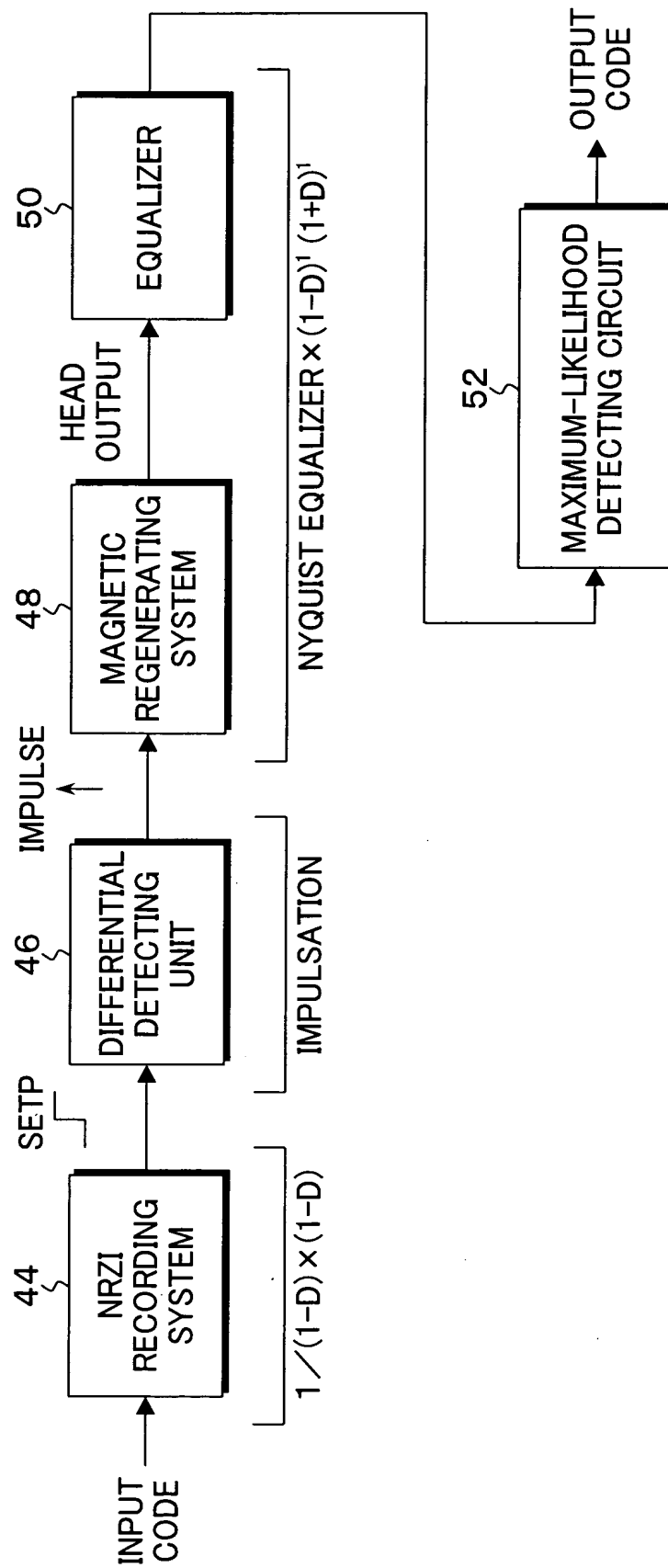


FIG. 6



5/29

FIG. 7

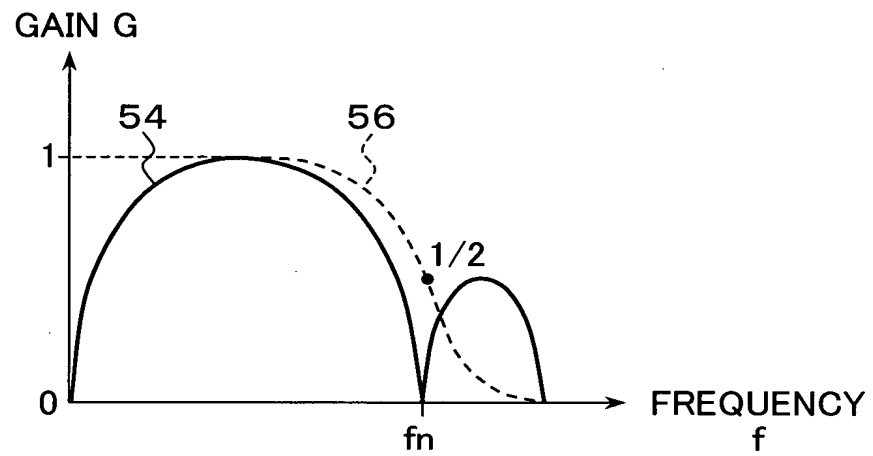


FIG. 8

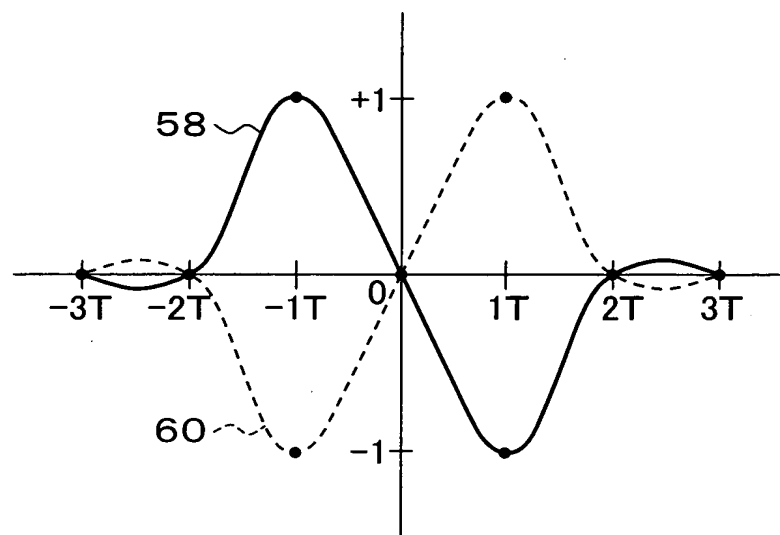
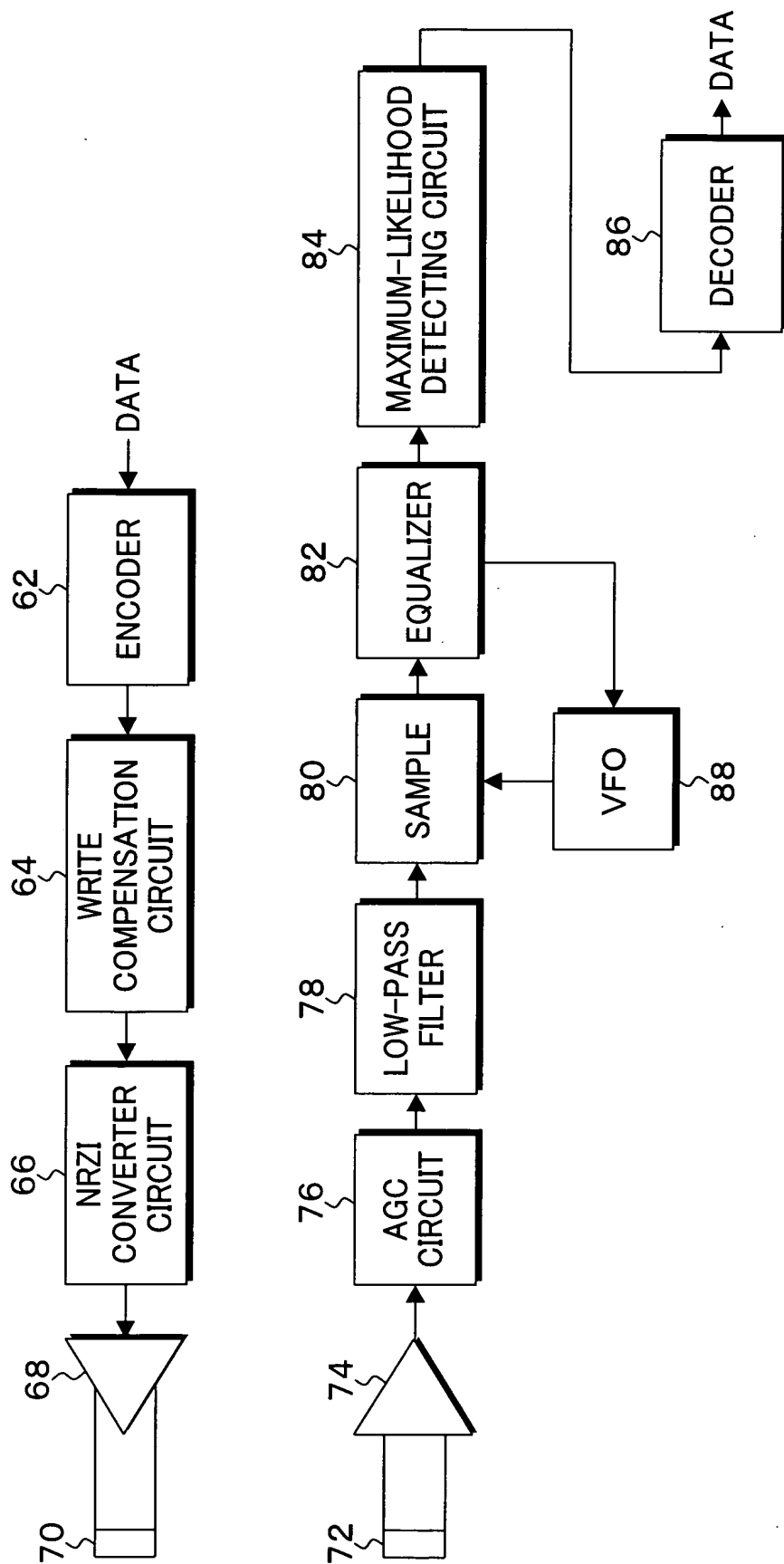


FIG. 9



7/29

FIG. 10

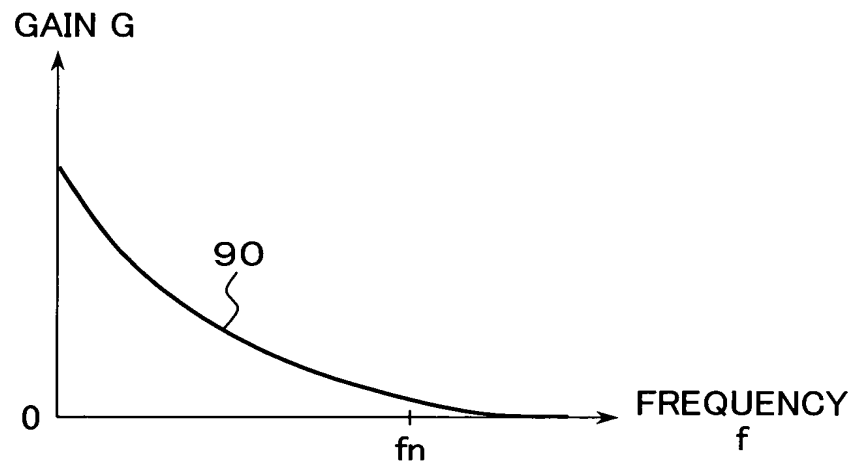
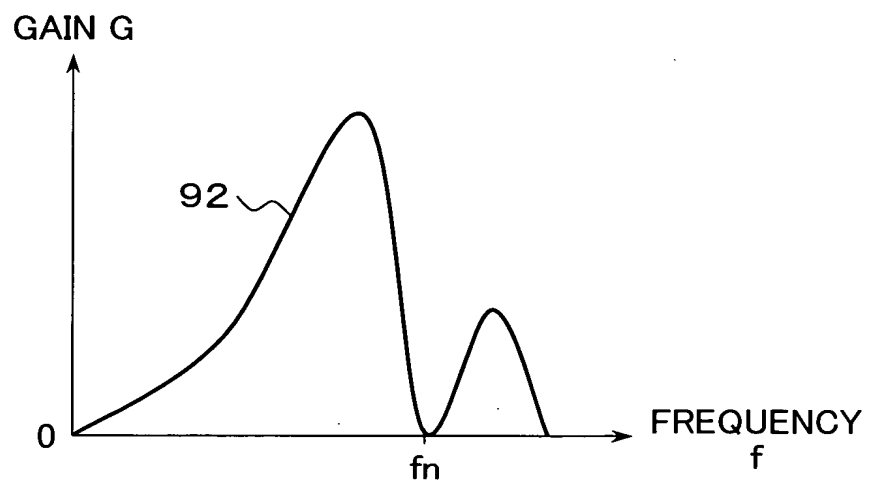
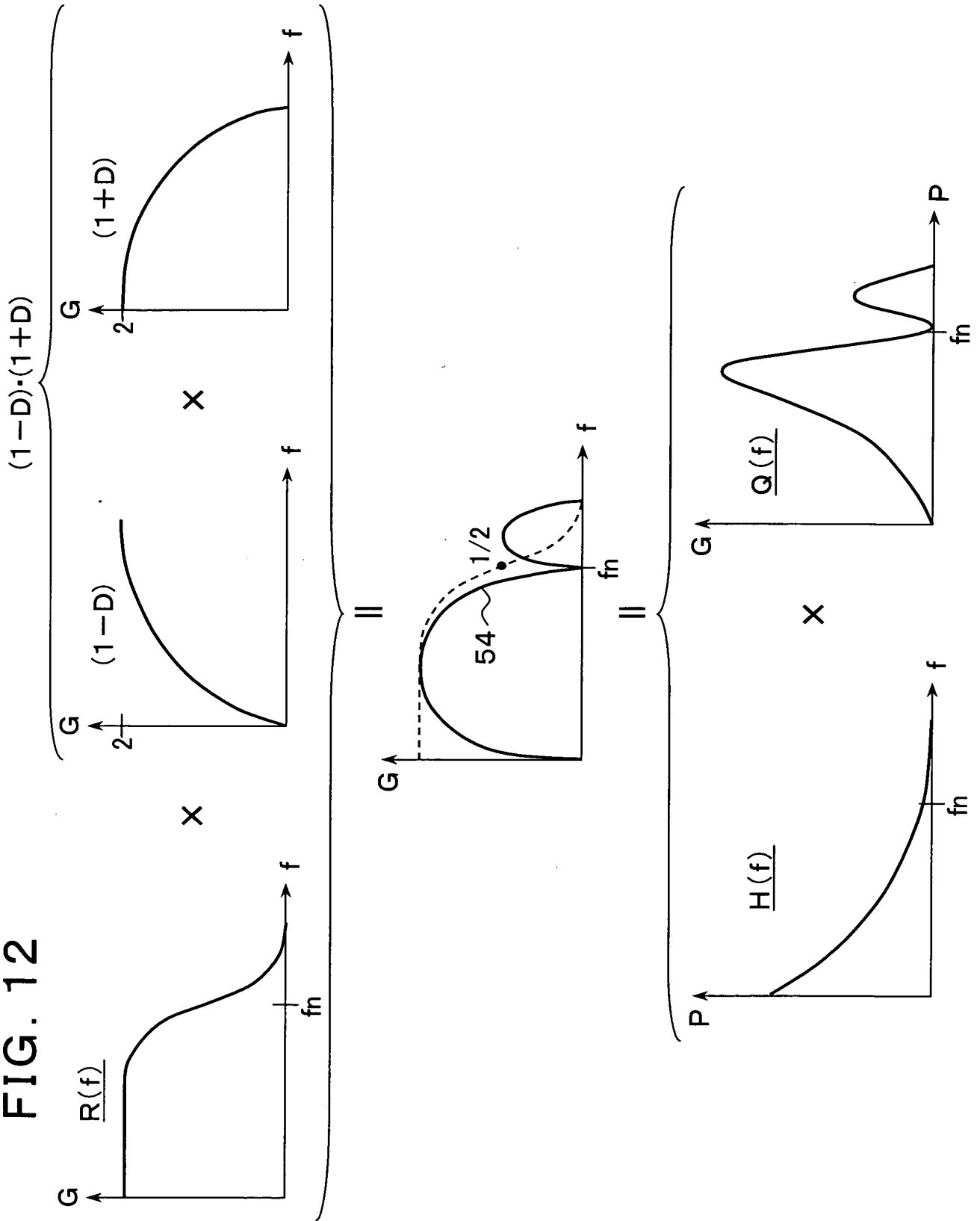


FIG. 11



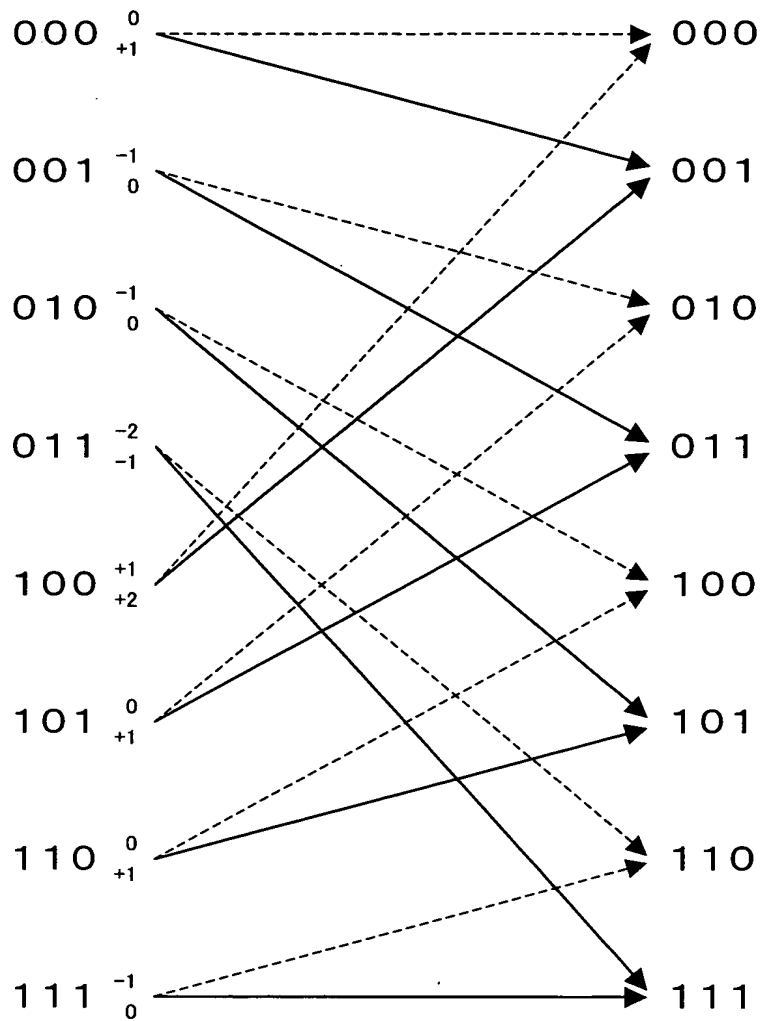
8/29

FIG. 12



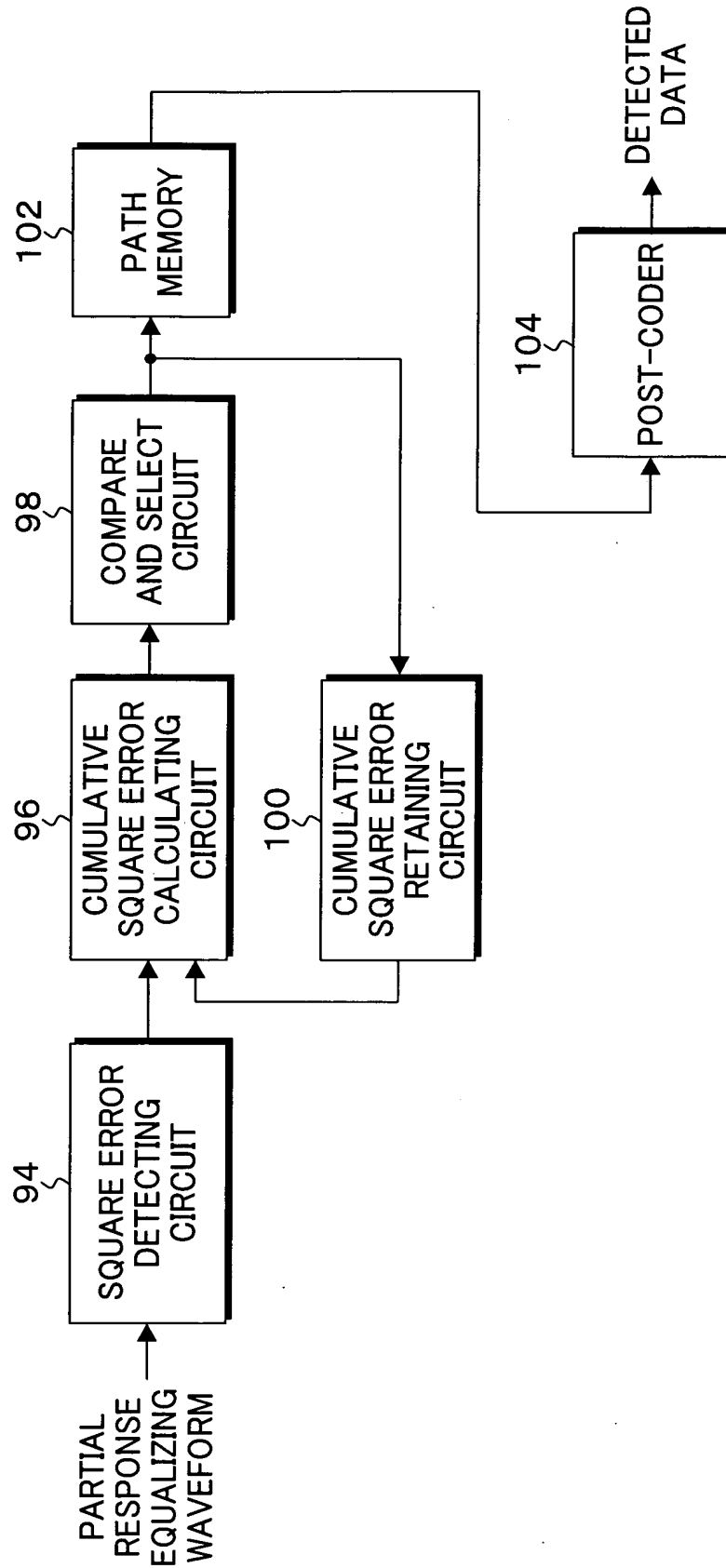
9/29

FIG. 13

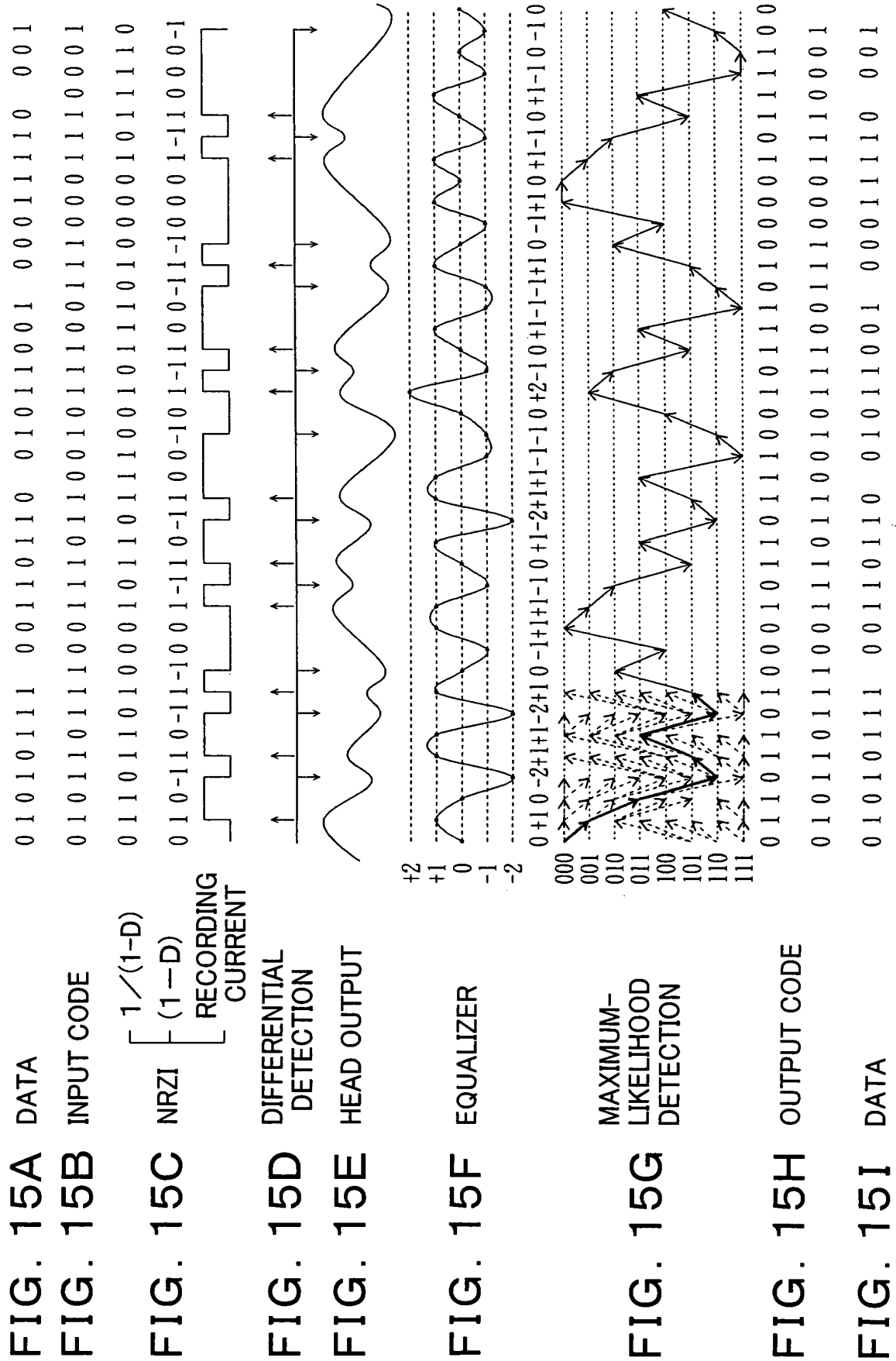


10/29

FIG. 14

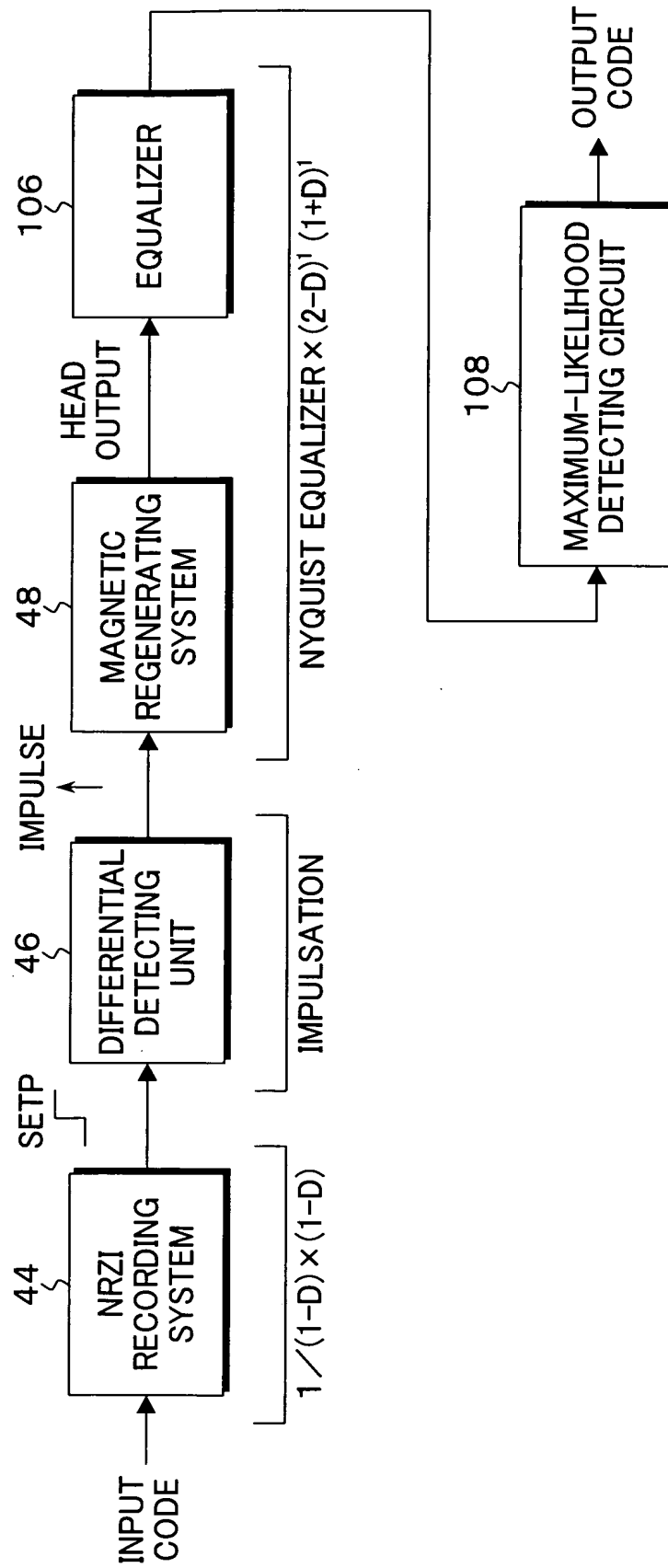


11/29



12/29

FIG. 16



13/29

FIG. 17

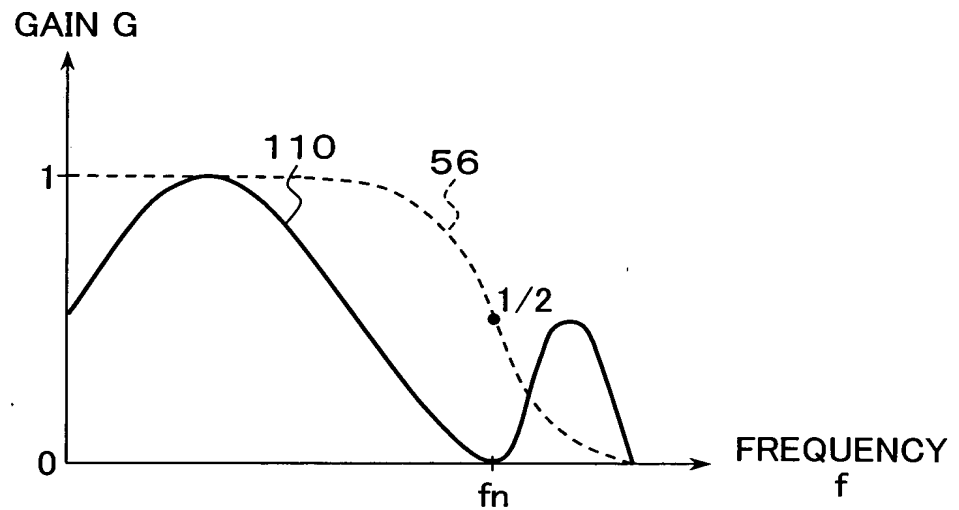
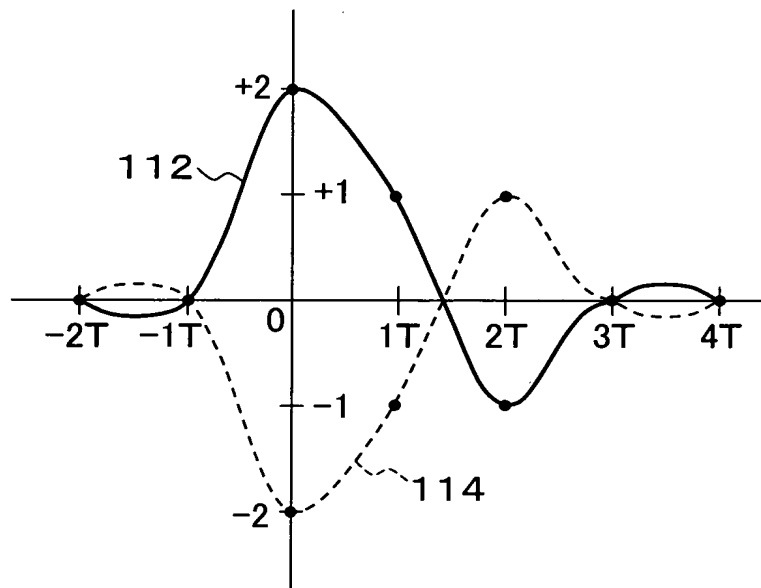
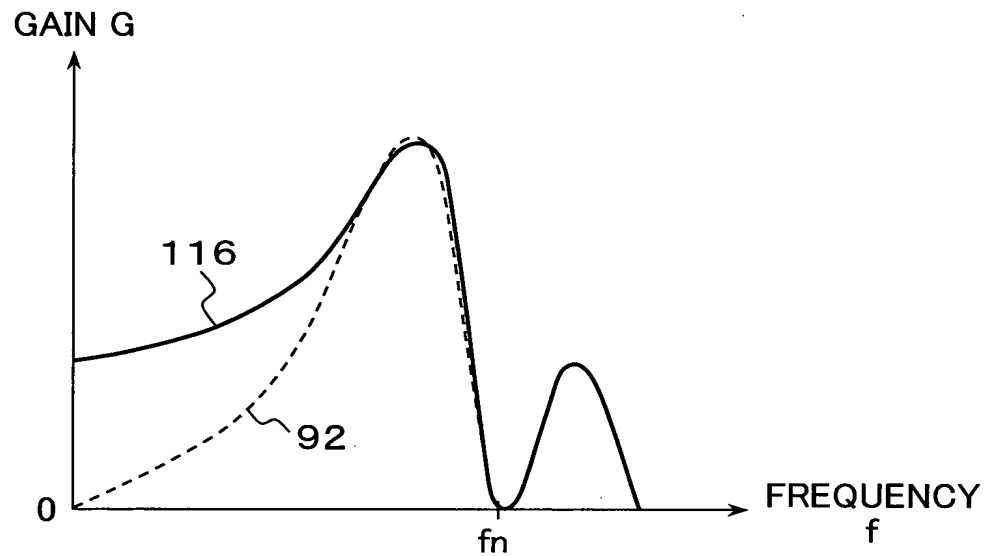


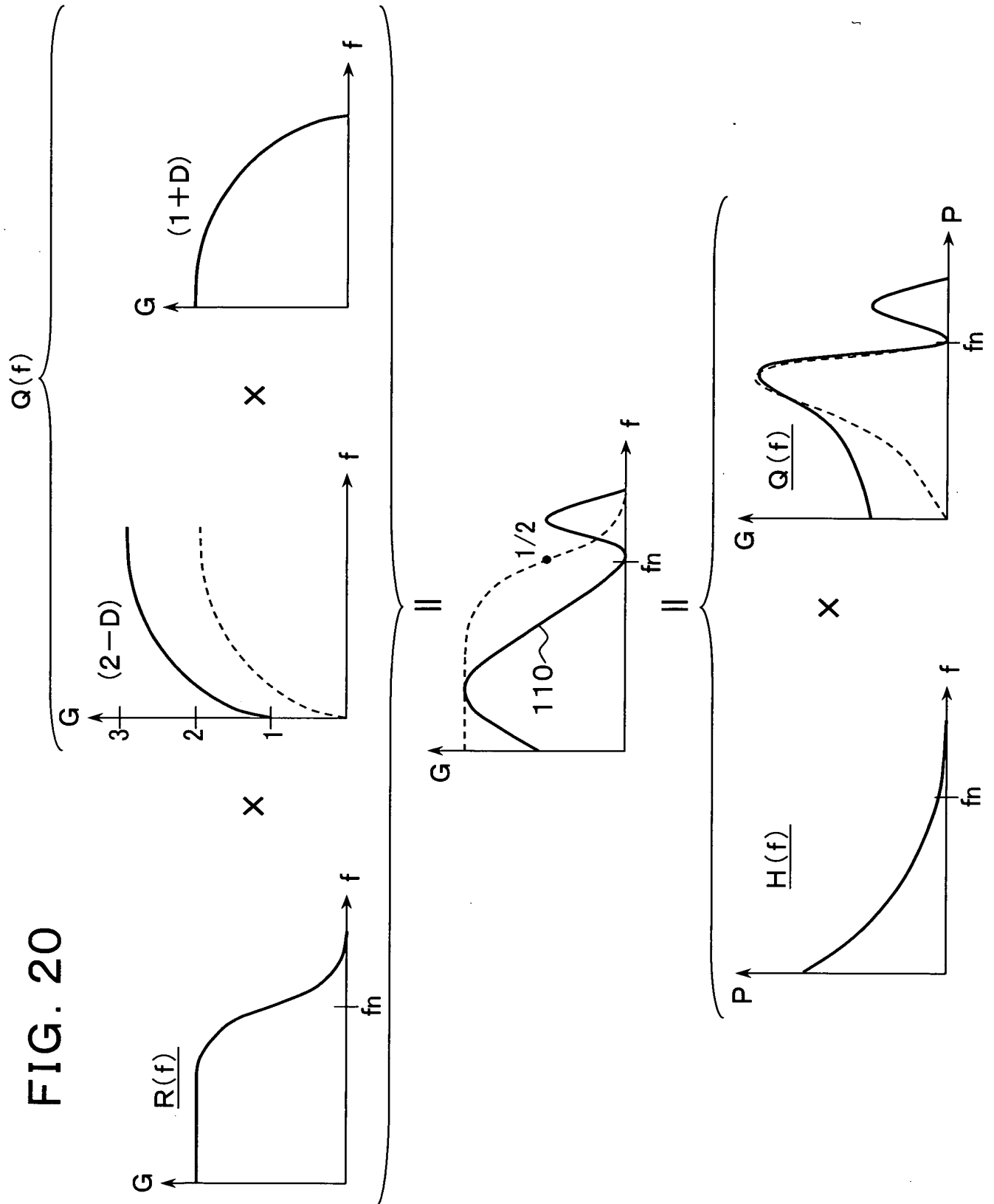
FIG. 18



14/29

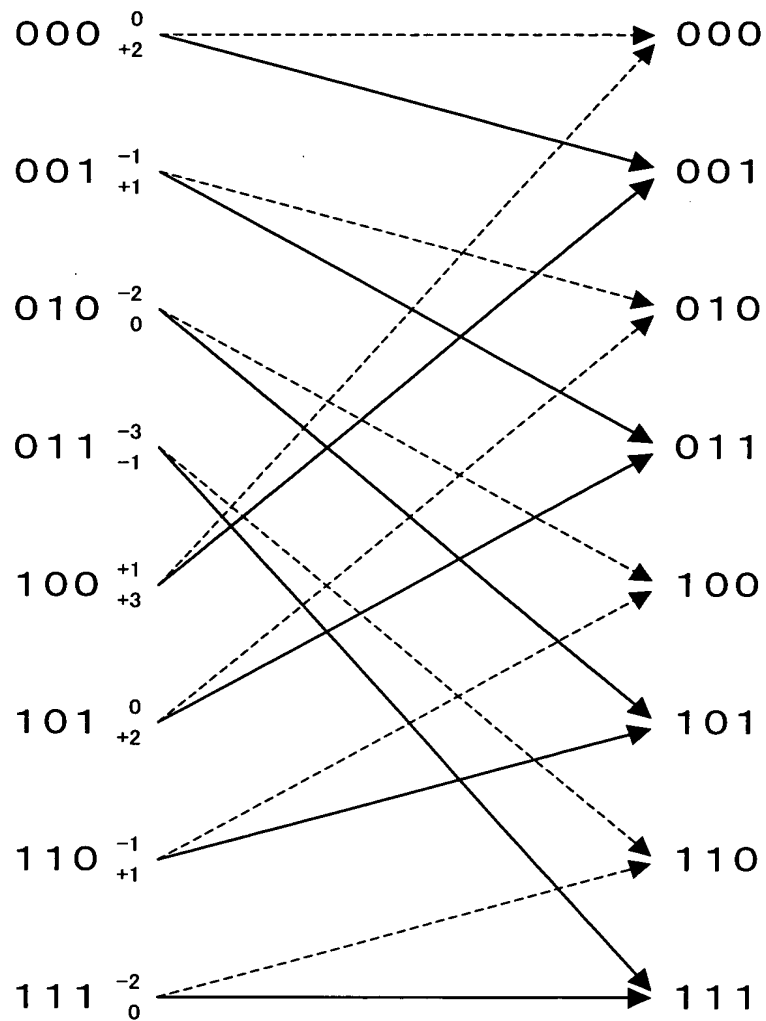
FIG. 19





16/29

FIG. 21



17/29

FIG. 22A DATA

01010111 00110110 01011001 00011110 001

FIG. 22B INPUT CODE

01011011100111011001011001110001110001

FIG. 22C NRZI $\left[\begin{array}{l} 1/(1-D) \\ (1-D) \end{array} \right]$ RECORDING CURRENT

011011010001011011100101110100001011110

FIG. 22D DIFFERENTIAL DETECTION

010-110-11001-110-1100-101-1100-11-10001-11000-1

FIG. 22E HEAD OUTPUT

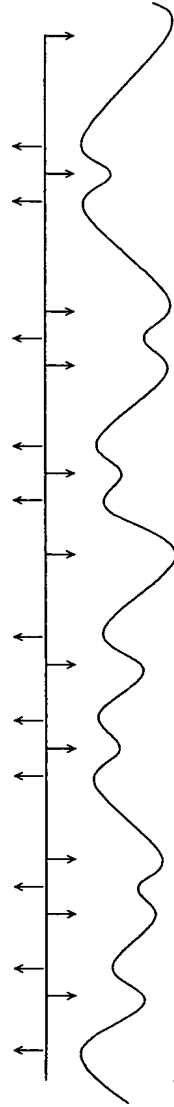


FIG. 22F EQUALIZER

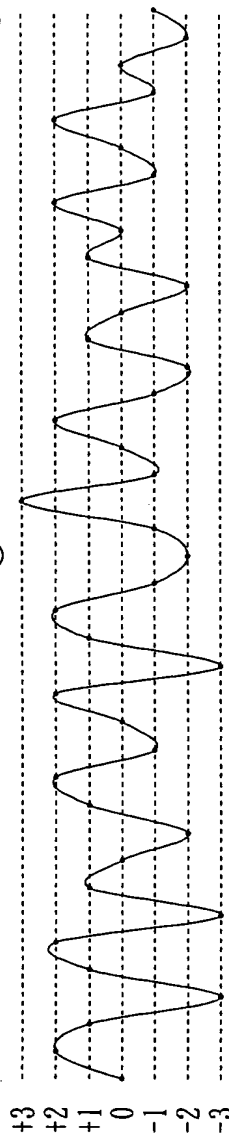


FIG. 22G MAXIMUM-LIKELIHOOD DETECTION

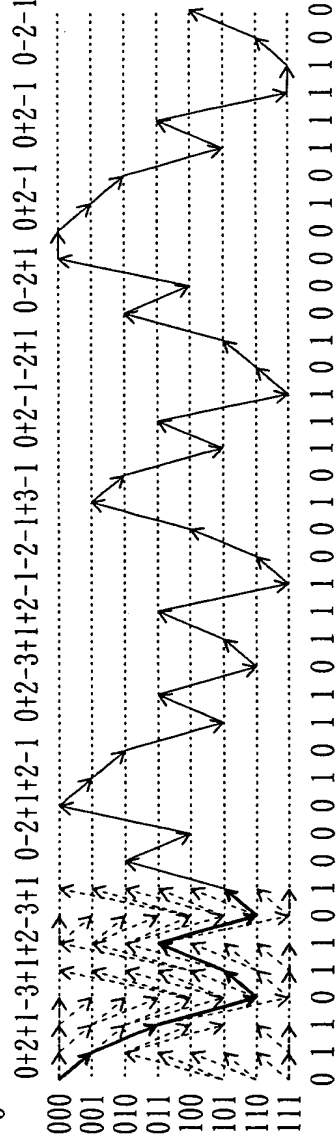


FIG. 22H OUTPUT CODE

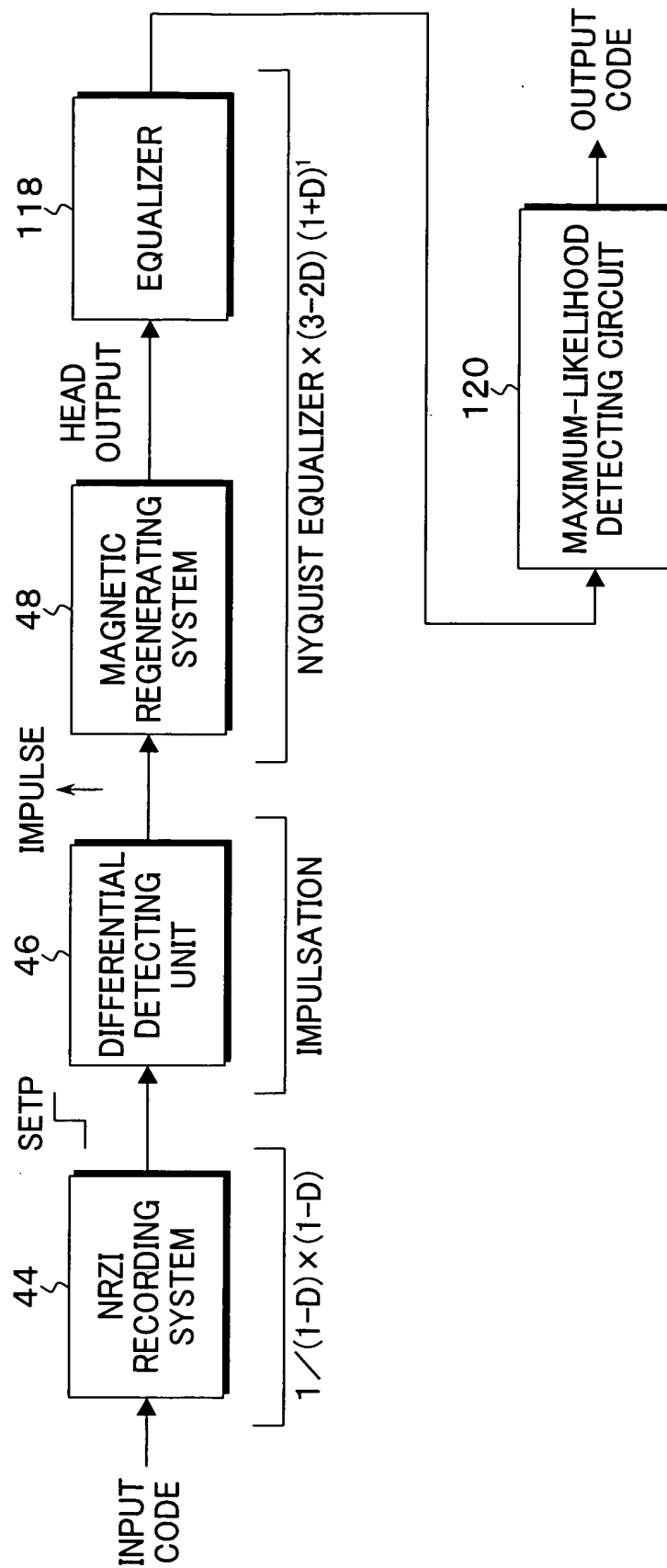
0110110100010110111001011101000010111100

FIG. 22I DATA

01011011100111011001011001110001110001

01010111 00110110 01011001 00011110 001

FIG. 23



19/29

FIG. 24

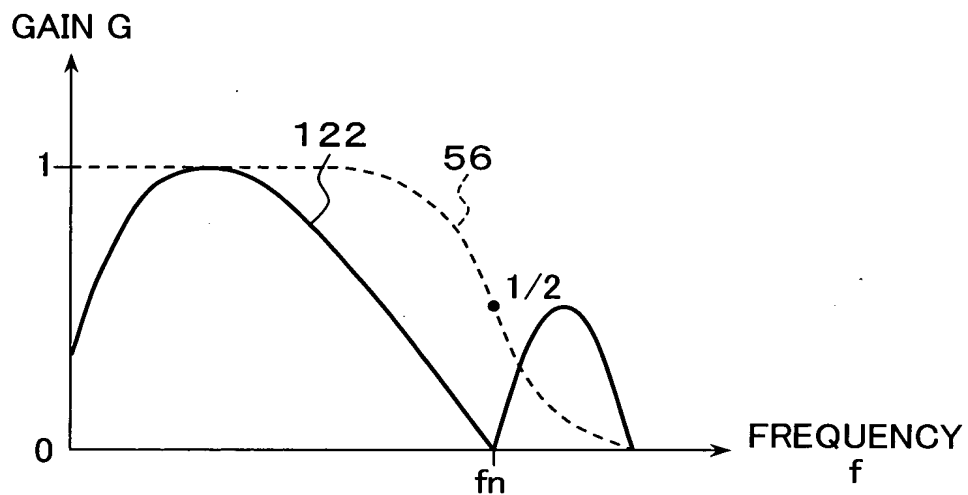
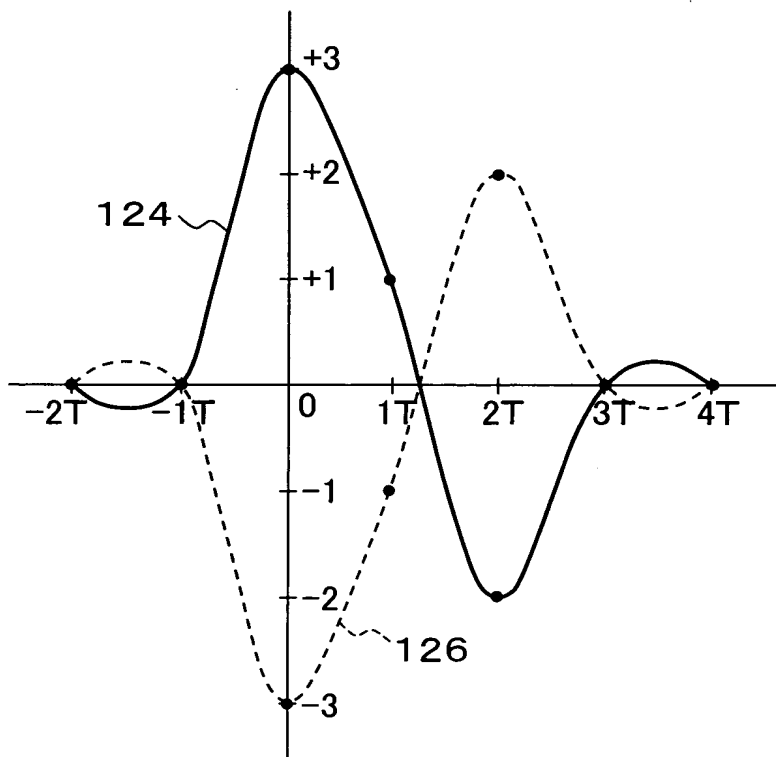


FIG. 25



20/29

FIG. 26

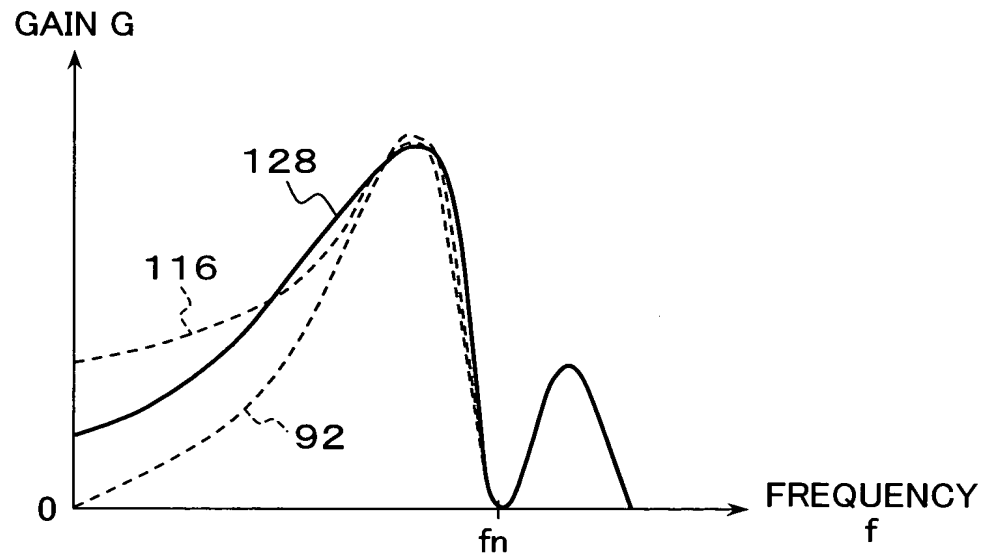
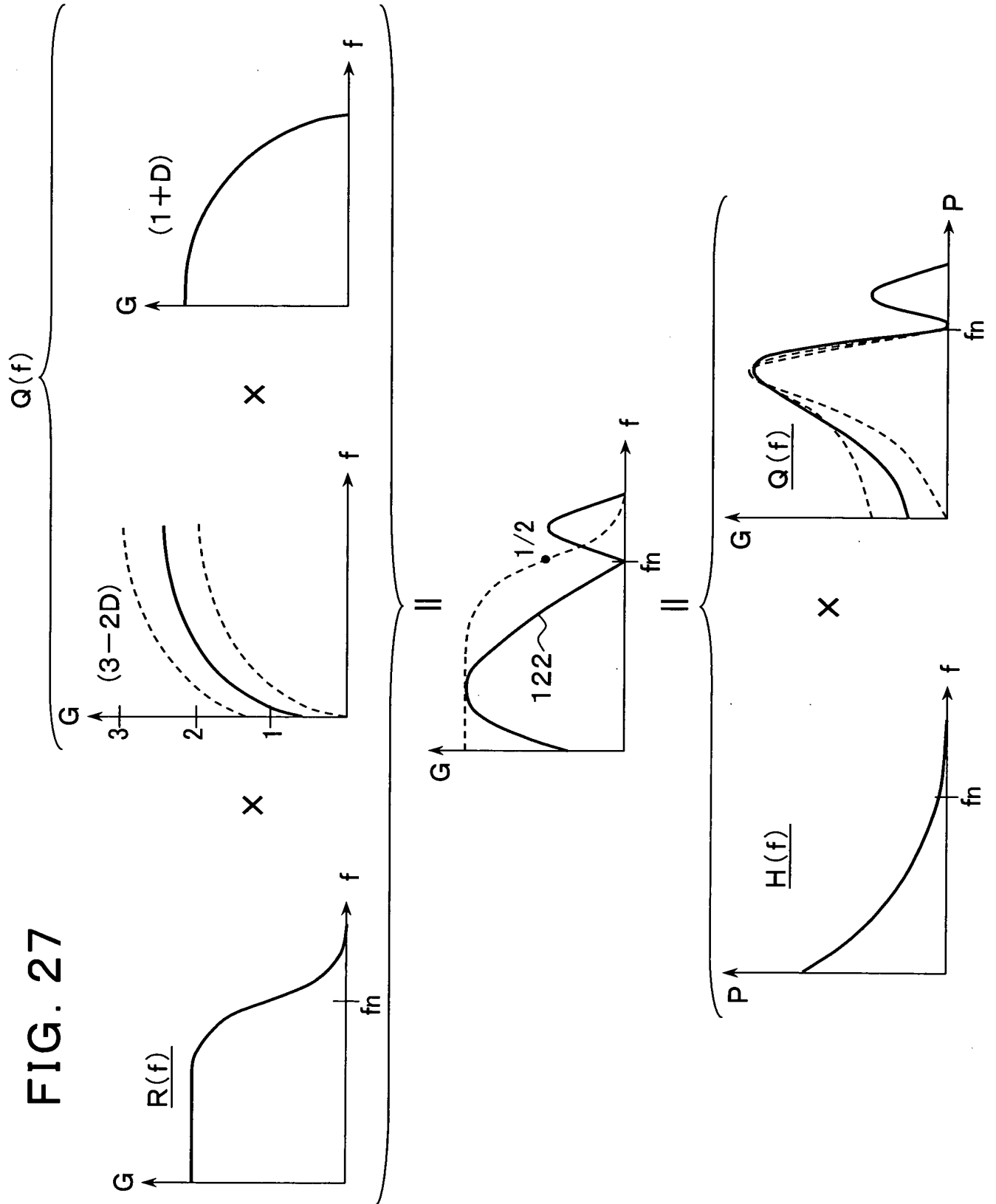
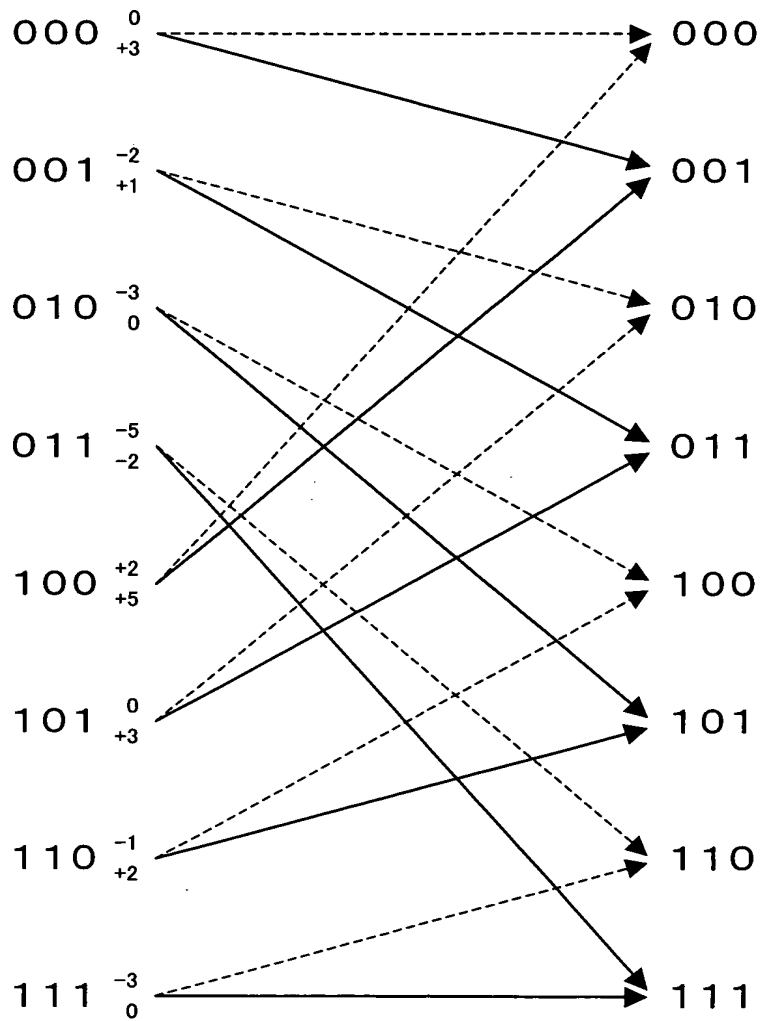


FIG. 27



22/29

FIG. 28



23/29

FIG. 29A DATA

01010111 00110110 01011001 00011110 001

FIG. 29B INPUT CODE

010110111001110110010111001110001110001

FIG. 29C NRZI

$\left[\begin{array}{l} 1/(1-D) \\ (1-D) \end{array} \right]$ RECORDING CURRENT

011011010001011011100101110100001011110
010-110-11-1001-1100-101-1100-11-10001-11000-1

FIG. 29D DIFFERENTIAL DETECTION

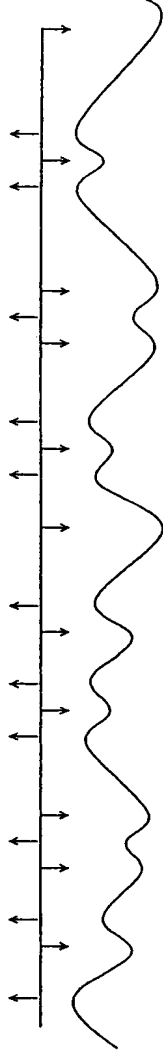


FIG. 29E HEAD OUTPUT

+5
+4
+3
+2
+1
0
-1
-2
-3
-4
-5

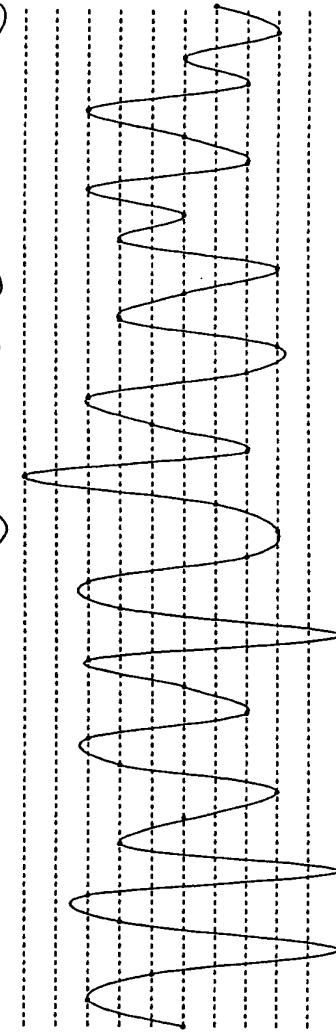


FIG. 29F EQUALIZER

0+3+1-5+2+3-5+2 0-3+2+3-2 0+3-5+2+3-2-3-1+5-2+1+3-2-3+2 0-3+2 0+3-2 0-3-1

FIG. 29G MAXIMUM- LIKELIHOOD DETECTION

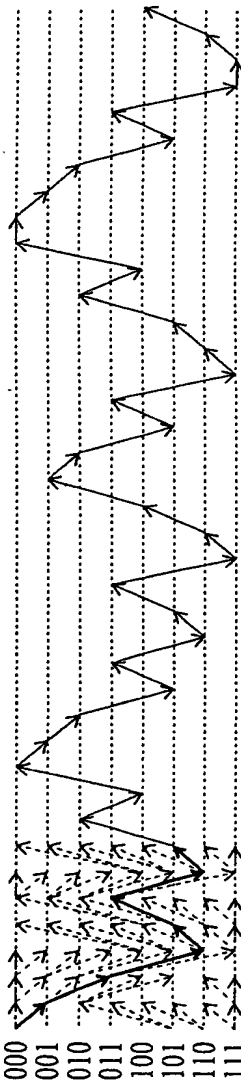


FIG. 29H OUTPUT CODE

0110110100010110111001011101000010111100

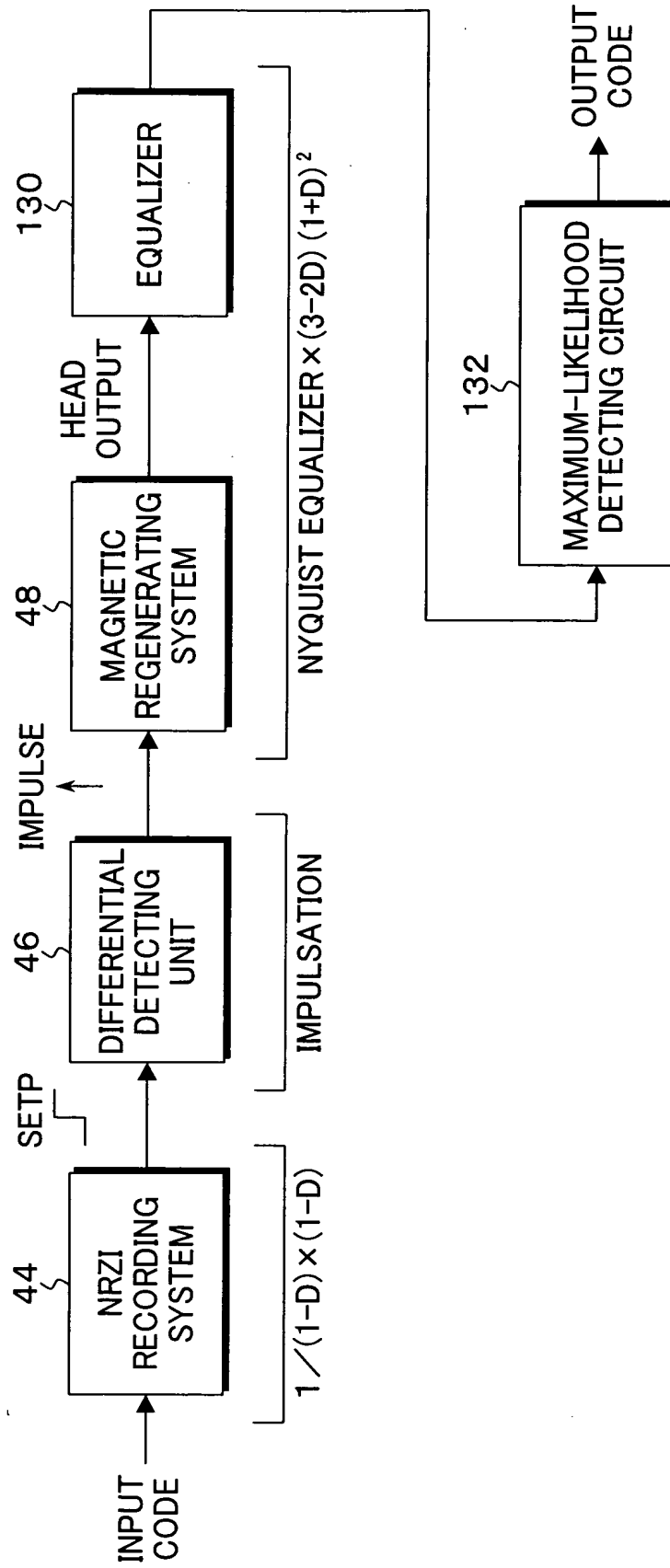
FIG. 29I DATA

010110111001110110010111001110001110001

01010111 00110110 01011001 00011110 001

24/29

FIG. 30



25/29

FIG. 31

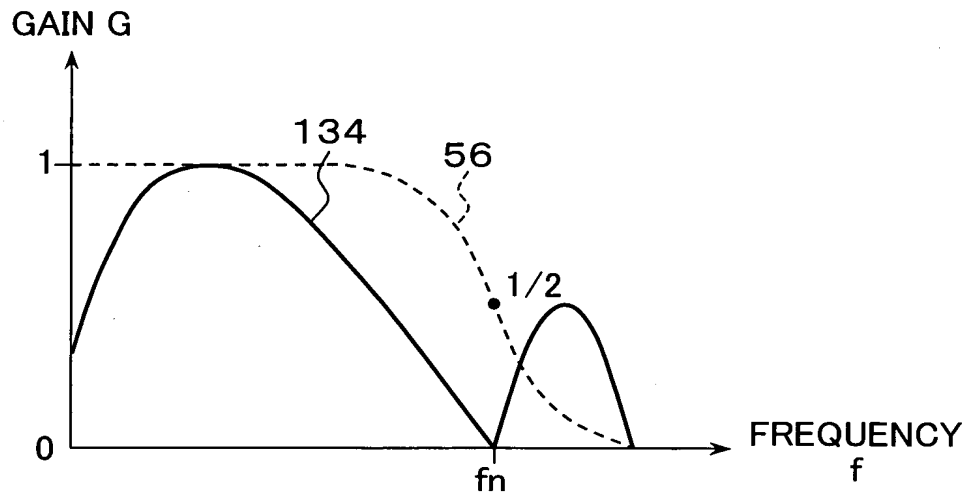
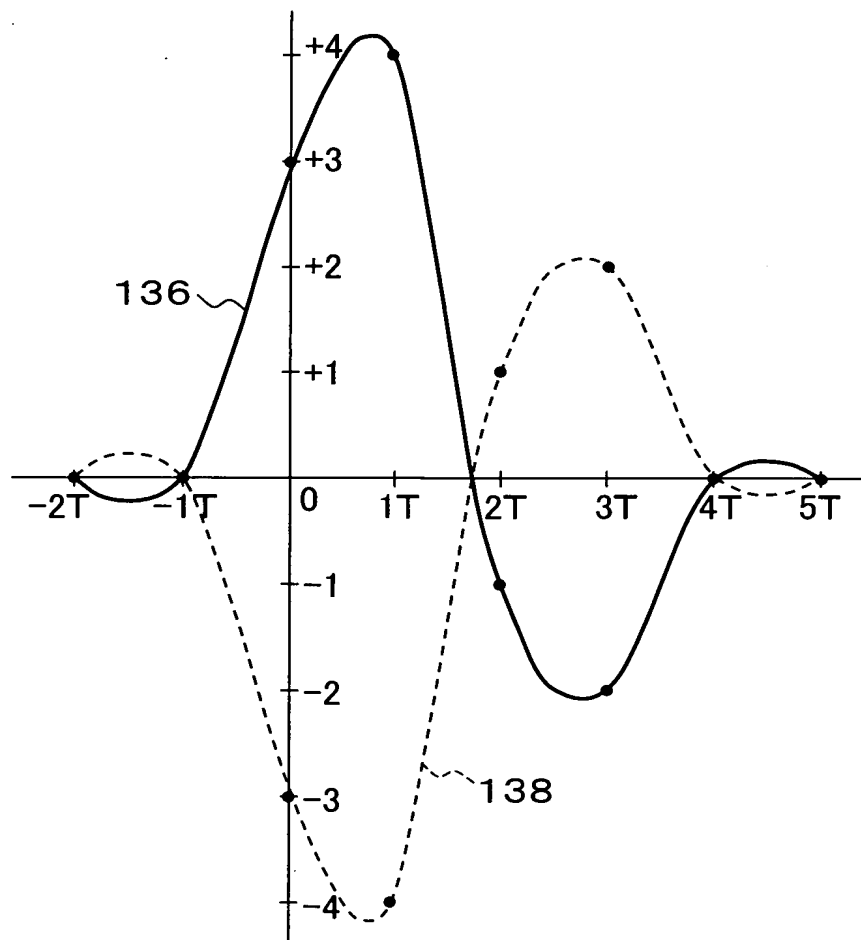
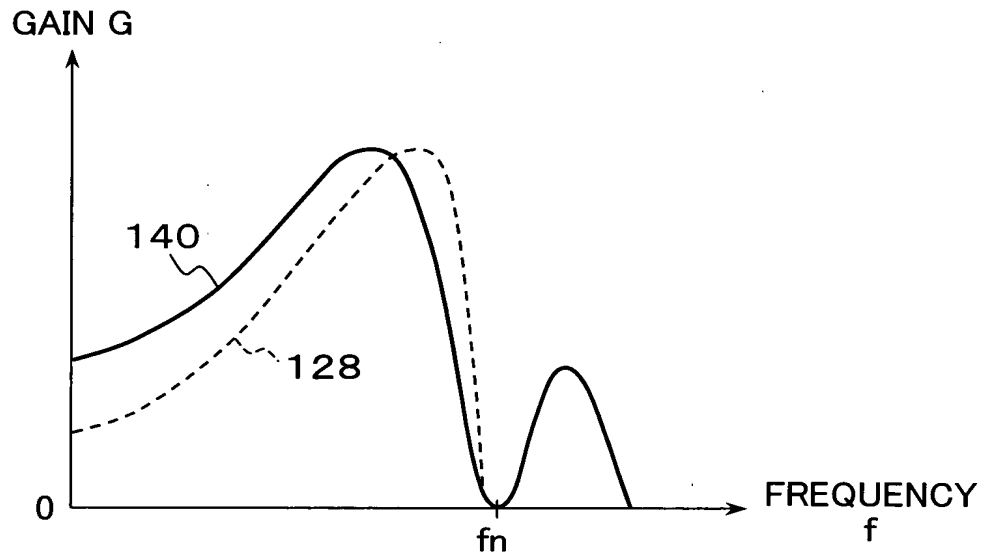


FIG. 32



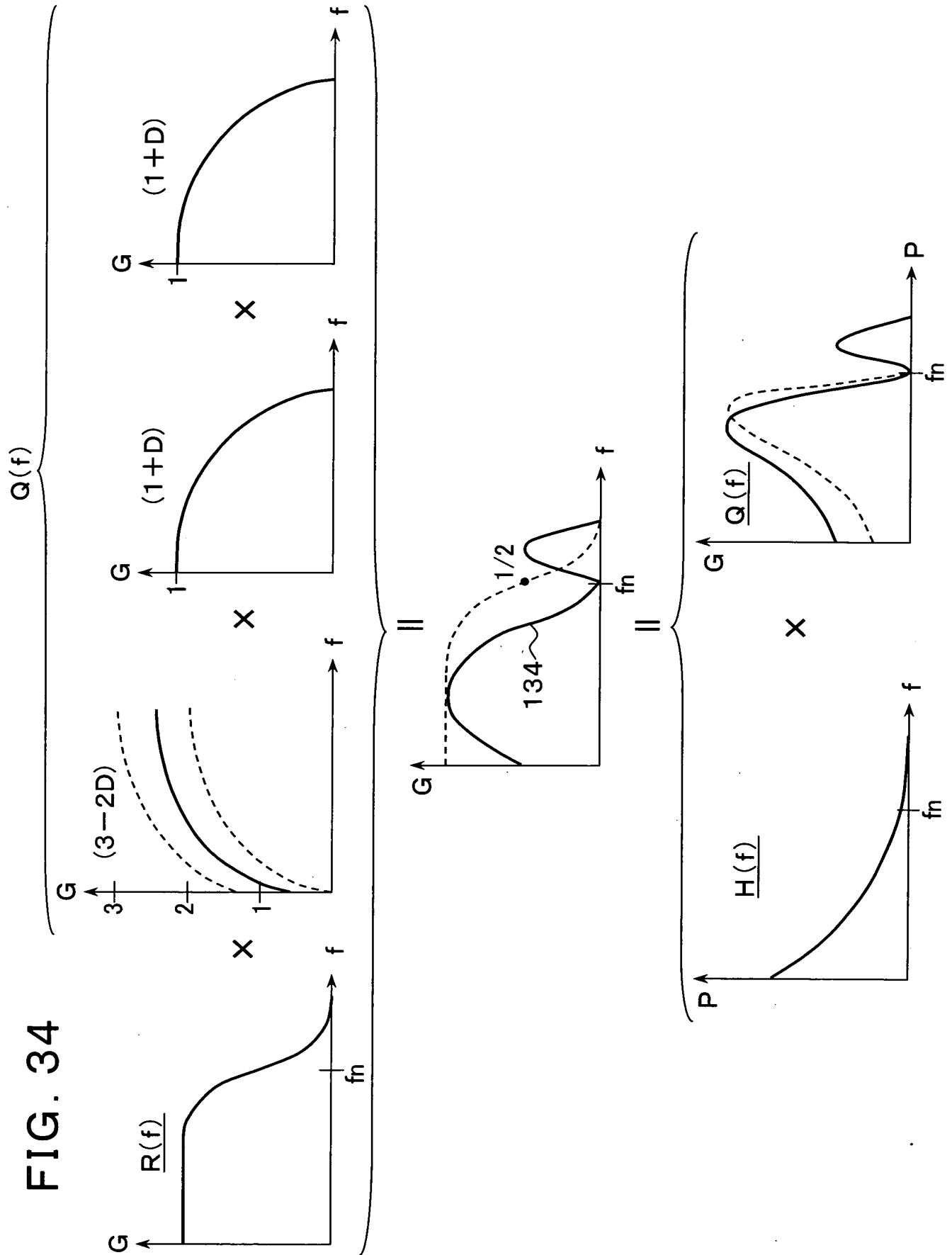
26/29

FIG. 33



27/29

FIG. 34



28/29

FIG. 35

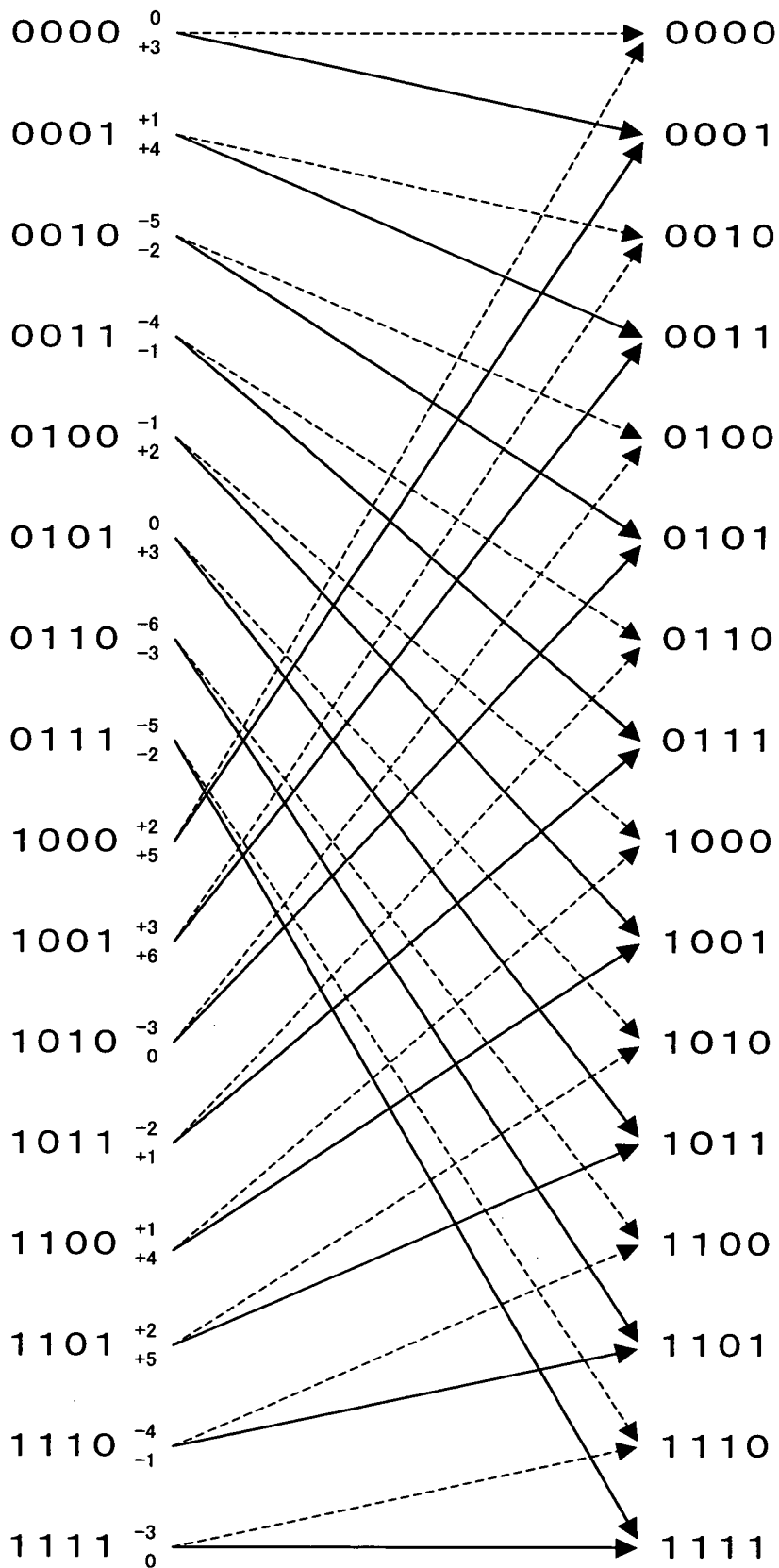


FIG. 36A DATA

FIG. 36B INPUT CODE

$1/(1-D)$

FIG. 36C NRZI

$(1-D)$

RECORDING CURRENT

FIG. 36D DIFFERENTIAL DETECTION

FIG. 36E HEAD OUTPUT

FIG. 36F EQUALIZER

FIG. 36G MAXIMUM-LIKELIHOOD DETECTION

FIG. 36H OUTPUT CODE

FIG. 36I DATA

